

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph number **[0019]** of Publication Number US 2005/0238704 A1 with the following amended paragraph:

US5879322 (Lattin, et al.) is directed to a self-contained transdermal drug delivery device by electro transport means with electrodes designed to be worn on the skin. The electro transport device can be used by patients to deliver a drug during a prescribed course of therapy, e.g. the delivery of an analgesic to control pain.

Please replace paragraph number **[0039]** of Publication Number US 2005/0238704 A1 with the following amended paragraph:

Solvent that is not absorbed by the skin in a sufficient way is carried off in another way than by absorption through the skin, e.g. by evaporation into the environment and/or by absorption by ~~an other mean~~, another means, e.g. absorbing substance such as silica gel. By this it is possible to avoid negative decrease of the concentration of active substance due to accumulation of the solvent which would impact the diffusion rate through the skin. Especially solvents based on water and/or alcohol are having at temperatures nearby the temperature of skin a vapor pressure which is sufficiently high to carry off the solvent by evaporation. However, the carrying off and/or diffusion rate of the solvent preferably is adjusted to the diffusion rate of the active substance through the skin to avoid accumulation of the solvent or precipitation of the active substance on the skin in a negative way.

Please replace paragraph number **[0068]** of Publication Number US 2005/0238704 A1 with the following amended paragraph:

FIG. 3 is showing a third embodiment of a dispensing system 1. A first and a second active substance s1, s2 is stored in a first and a second reservoir 5.1, 5.2. The flow (indicated by arrows) of the first and the second fluid s1, s2 into a connecting pipe 25 is controlled by a first and a second valve 19.1, 19.2, as described above interconnected, to a programmable flow control device [[15]] 8. The connecting pipe 25 may comprise mixing means 26 such as impellers or vortex means providing an appropriate preparation

of mixture of the active substances s1, s2. This offers the opportunity to administer drugs which cannot be stored together due to incompatibility or another reason. Alternatively or in addition the bringing together of several active substances may take place in the administration chamber 9 of the administration device 6. The solvent absorption chamber 13 is separated by separation means 14 in the described manner from the administration chamber 9. The separation means 14 are made such that solvent is preferably absorbed by evaporation (indicated by arrows 17). In the shown embodiment the evaporation rate is controlled/adjusted by a fluid stream (indicated by arrows 27), preferably air, which is guided into the solvent absorption chamber 13 by an inlet 28 and exits by an outlet 29. The condition of the administration device and the absorption of the at least one active substance into the skin 11 as indicated by arrows 18, may be controlled by sensors 30, 31 interconnected to the control device [[15]] 8 by data connections 32. The sensors of the herein described embodiment are arranged in the administration chamber 9 and the solvent absorption chamber 13 such that the administration of the at least one active substance and/or the absorption of the at least one solvent may be controlled. Depending on the field of application, the sensors 30, 31 are suitable to measure relevant parameters such as temperature and/or humidity and/or pressure and/or concentration.

Please replace paragraph number **[0072]** of Publication Number US 2005/0238704 A1 with the following amended paragraph:

FIGS. 4 a) to c) are showing three further embodiment of a dispensing system 1 for administration of at least one active substance s. The dispensing systems 1 according to FIGS. 4 a) to 4 c) have in general a similar set up comprising an outer housing 39 with a display 38 interconnected to a programmable control unit 8. The lower surface of the devices 1 serves as footstep 40 while in use on a porous surface 10 and comprises an interface 12 for transferring active substance to a skin 11 through the porous surface 10. Inside the housing 39 the devices 1 comprise a drug reservoir 5 for at least one active substance s. The drug reservoir 5 is preferably a collapsible bag or a pressurized compartment due to internal or external pressure suitable to expel active substance into the administration chamber 9 via a pipe 4 which interconnects the drug reservoir 5 with

the administration reservoir 9. In use the administration reservoir 9 is fluidly interconnected to the porous surface 10 of skin 11 such that active substance s dispensed into the administration chamber 9 may pass into skin 11 as indicated by arrows 18. The flow of the active substance s is controlled by a first valve and/or a pump 36 which is logically interconnected to the control unit 8 which controls the administration of active substance s according to a preset regime. A solvent recovery means 13 is used to remove depleted solvent from the administration chamber 9 by waste pipe 41. If administration of the active substance needs to be stopped it is possible to pump active substance from the administration chamber back into the administration drug reservoir 5 or the connecting pipe 4 by pump 36.

Please replace paragraph number **[0075]** of Publication Number US 2005/0238704 A1 with the following amended paragraph:

The embodiment of FIG. 4c) comprises a pressurized drug reservoir 5 in conjunction with a tube or pipette 4, a micro pump 36 controlled by control unit 8 pre-programmed to dispense and start pumping active substance s onto diffusion surface 12. A second pinch valve and/or micro pump 37 interconnects the administration chamber 9 with the waste reservoir 13. The micro pump 37 either pumps solution into the waste reservoir 13 and/or the valve [[36]] 37 opens and depleted carrier solution is absorbed into the waste reservoir 13.